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CLAIMS

What is claimed is:

A spatial scalable video decoder (400) for receiving each of a standard resolution bitstream and a high-resolution scalable bitstream and providing a high-resolution video sequence, the decoder comprising:

an I-picture detector (464) for receiving the standard-resolution bitstream; a standard-resolution Intra decoder (466) in signal communication with the I-picture detector for decoding I-pictures;

a high-resolution video decoder (482) for receiving the high-resolution scalable bitstream; and

a selector (486) in signal communication with the standard-resolution Intra video decoder and the high-resolution video decoder for selecting between the outputs from the standard-resolution Intra video decoder and the high-resolution video decoder to provide the high-resolution video sequence.

- 2. A decoder as defined in Claim 1, further comprising an I-picture indicator in signal communication between the standard-resolution Intra decoder and the selector.
- 3. A decoder as defined in Claim 1, further comprising an I-picture selector in signal communication with the I-picture detector.
- 4. A decoder as defined in Claim 1, further comprising an upsampler (470)
 25 in signal communication with the standard-resolution Intra decoder.
 - 5. A decoder as defined in Claim 1, further comprising a summing unit (484) in signal communication with the high-resolution decoder.
- 6. A decoder as defined in Claim 1, further comprising high-resolution frame stores (490) in signal communication with the high-resolution decoder.

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- 7. A decoder as defined in Claim 6 wherein the high-resolution frame stores is in signal communication with the selector for receiving the high-resolution video sequence.
- 8. A decoding method for providing spatial scalable decoded video data, the method comprising:

receiving a standard-resolution bitstream;

receiving a high-resolution scalable bitstream;

Intra decoding I-pictures from the standard-resolution bitstream;

up-sampling the decoded I-picture to high-resolution;

high-resolution decoding a current picture from the high-resolution scalable bitstream; and

summing the decoded current picture with the up-sampled I-picture.

9. A decoding method as defined in Claim 8, further comprising: selecting one of the decoded current picture and the summed picture in response to an indication of the presence of an I-picture; and outputting the selected picture in a high-resolution video sequence.